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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,137	08/21/2003	Duane Powell	ABINITI.006A	1049
20995 7590 01/26/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER BHAT, NINA NMN	
			ART UNIT 1764	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/647,137

Applicant(s)

POWELL ET AL.

Examiner

N. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006 and 08 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendments and arguments of November 6, 2006 and the IDS filed January 8, 2007 has been fully and carefully considered. Applicant's amendments overcome the objection and the 112, second paragraph rejections accordingly the objection over claim 13 and rejection under 112, 2nd paragraph over claims 1 and 19 are withdrawn. Applicant's amendments to the claims do not result in patentability of the claims. The claims remain rejected under 102(a) over the Ciampi WO02/06160 patent.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi et al. WO 02/06160.

Ciampi et al. teach a device for the synthesis of ferrate which includes a first holding chamber; a second holding chamber; a mixing chamber controllably connected to the first and second holding chambers, a reaction chamber controllable connected to

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the mixing chamber into which the mixture is kept for a period of time; and an output opening in the reaction through which the reacted product can be transported to a proximal site of use. Note paragraph [0024]. Ciampi et al. teach an on-site generation ferrate system; the device is provides ferrate delivered to the site of use without substantial purification, packaging, shipping, transfer or preparation. Note paragraph [0045 -0046]. With respect to the reaction or production of ferrate the iron salt as described by Ciampi et al. are the same salts as described by applicant in claims 4-5 as is specifically taught in Paragraph [0061]. The oxidizing agent as claimed in claims 6-7 is taught by Ciampi et al. in Paragraph [0062]. The base used by applicant in the device as claimed in claims 8-9 is taught in Paragraph [0059]. With respect to claims 10-19, wherein applicant claims that the device includes a flowmeter, a measuring unit comprises a scale, the mixer including at least one eductor, the mixer is a mechanical, the reaction chamber comprises a reaction vessel and reaction this has been taught generically or specifically by Ciampi by providing control means from the first chamber and second chamber wherein the reactants are controlled or metered into the mixing chamber, there are control means between the mixer and the reaction chamber and the also control means for dispensing the ferrate at is end point. The mixer as claimed by applicant is the same type of mixer taught and used by Ciampi et al. the mixer being a mechanical agitating type of mixer.[Note paragraphs [0124] to [0129].

However Ciampi et al. does not specifically teach applicant's drain nor specifically the temperature control unit in relationship to the opening or closing of the valve.

Ciampi et al. fairly teaches and suggests applicant's device for the synthesis of ferrate with the exception of the drain. Applicant has claimed that the drain is located at a site proximal to the site of use of the ferrate. The drain as claimed by applicant can be read given its broadest most reasonable interpretation as a drain for waste or a drain which is fluidly connected to the endpoint of use where the ferrate is to be used. Ciampi et al. further teaches on Page 17 that the temperature of the reaction is controlled through feed forward feedback control, on page 20, it is further stated how the temperature is controlled in Paragraph [0128]. In paragraph [0127], Ciampi teaches that the control of the reaction can take place using valves and pumps (113), which are used in order to control the fluid, flow into the reaction chamber. In chemical reactions it is well known to the ordinary artisan familiar with reactor design that valves, pump, sensors are obvious expedients to those familiar with feed forward temperature control and control of reactors in general to provide a temperature control unit connected to the reaction chamber through a valve which opens and/or closes so that the ferrate does not flow through the temperature control unit when the valve is closed would have been obvious from the teachings of Ciampi et al. and to modify the invention to include applicant's specific control mechanism where feed forward temperature control has been taught renders the invention obvious. With respect to the drain, it would have been obvious from one having ordinary skill in the art, to provide a fluid outlet which can be a drain which is located at a site proximate to the site of use of the ferrate, the drain as explained can be the conduit to which the ferrate is delivered to its end point of use, and thus to include the drain or conduit of fluid connection to end point of use as

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claimed by applicant has been fairly taught and suggested by Ciampi et al. and thus renders applicant's invention as a whole obvious to one having ordinary skill in the art at the time the inventions was made.

3. Applicant has argued that from the IPER the D1 reference corresponds to the WO 02/06160 patent to Ciampi et al. and that the European Patent Office determined that D1 fails to indicate that the temperature control unit operates or connected to the valve. The examiner does not dispute this and has accordingly made the rejection under 103(a) as being obvious over the Ciampi WIPO document. For the same reasons deemed by the European Patent Office in the PCT/ISA/237, the invention as claimed is obvious over the D1 reference to Ciampi and that the claims do not claim any features which in combination with any features which, in combination with the features of any claim to which they refer meet the requirement for inventive step which corresponds to obviousness.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NINA BHAT
PRIMARY EXAMINER
GROUP 1980 TC 1700